50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Population of Woodland Caribou Found in Washington, Idaho, and Southern British Columbia

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Emergency rule.

SUMMARY: The Fish and Wildlife Service determines as Endangered the population of woodland caribou *(Rangifer tarandus caribou)*, sometimes known as the southern Selkirk Mountain herd, found in extreme northeastern Washington, northern Idaho, and southern British Columbia. This isolated herd is the only population of caribou that still regularly occurs in the conterminous United States. The population has fallen to only about 30 individuals, a level that probably cannot sustain the herd much longer. At least one or two adults and subadults are being lost each year, calf survival is apparently low, and there is evidently no immigration from other herds in Canada. The population is jeopardized by such factors as poaching, habitat loss to timber harvesting and wildfires, collisions with motor vehicles, and genetic problems through inbreeding. The population was first listed as Endangered through an emergency rule on January 14, 1983. The present rule will reestablish this emergency coverage until a new final rule, providing permanent protection of the Endangered Species Act, can take effect.

DATE: The effective date of this rule is October 25, 1983.

ADDRESS: The complete file for this rule is available for inspection during normal business hours, by appointment, at the Service's Regional Office, Lloyd 500 Building, Suite 1692, 500 NE. Multnomah Street, Portland, Oregon 97232.

FOR FURTHER INFORMATION CONTACT: Mr. Sanford R. Wilbur at the above address (503/231–6131 or FTS 429–6131).

SUPPLEMENTARY INFORMATION:

Background

According to the most recent taxonomic work (Banfield, 1961; Hall, 1981), the reindeer of Eurasia and the caribou of North America belong to a single species, *Rangifer tarandus*. This species is divided into a number of subspecies, among which is the woodland caribou (*Rangifer tarandus caribou*). This subspecies once occupied nearly the entire forested region from southeastern Alaska and British Columbia to Newfoundland and Nova Scotia. In the 48 conterminous States of the United States, the subspecies is known to have occured in Washington, Idaho, North Dakota, Montana, Minnesota, Wisconsin, Michigan, Vermont, New Hampshire, and Maine. Largely because of killing and habitat alteration by people, indigenous caribou disappeared from New England by about 1908 and from the Great Lakes States by 1940. A few individuals, probably wanderers from Canada, were observed in northeastern Minnesota in 1980-1981 (Mech, Nelson, and Drabik, 1982). There have been scattered reports from northwestern Montana during the last decade (Carlton, 1983), but the animals involved are probably not members of the herd that is the subject of this rule. There are still substantial numbers of woodland caribou in Canada, though populations there have been generally declining.

The only caribou population that is still known to regularly occupy the conterminous United States is found in northern Idaho and northeastern Washington. This population, sometimes called the southern Selkirk Mountain herd, also occurs in southern British Columbia. The total approximate area of normal utilization is bounded as follows: starting at the point where the Columbia River crosses the Washington-British Columbia border; thence northward along the Columbia River to its confluence with the Kootenay River in British Columbia; thence northeastward along the Kootenay River to its confluence with Kootenay Lake; then southward along Kootenay Lake and the Kootenai River, and across the Idaho-British Columbia border, to the town of Bonners Ferry, Idaho; thence southward along U.S. Highway 95 to the Pend Oreille River; thence westward and northward along the Pend Oreille River, and across the Idaho-Washington State line, to the Washington-British Columbia border; thence westward along the Washington-British Columbia border to the point of beginning.

Early records suggest that in the 19th century, caribou were plentiful in the mountains of northeastern Washington, northern Idaho, northwestern Montana, and adjacent parts of southwestern Canada. As in the case of other big game animals of North America, unrestricted hunting probably led to a major reduction of caribou numbers in this region by 1900. Subsequently, the numerical status of the southern Selkirk herd has not been completely clear. Various estimates, including some of those published by the Service in earlier **Federal Register** notices on this herd, now appear to have been incorrect. Only since January 1983, after initiation of radio-tracking studies and other survey work funded through the Federal Pittman-Robertson program and section 6 of the Endangered Species Act, has a definitive picture begun to emerge. The estimates by Flinn (1956) and Evans (1960), that there were still about 100 individuals in the population during the 1950's, do seem reasonable. It also is apparent that numbers then continued to decline, but not to as few as 13–20 individuals, as had been previously suggested. In the spring of 1983, an actual count of 26 caribou was obtained, and several other animals were thought to exist. Therefore, it is likely that the herd currently contains about 30 individuals.

In the **Federal Register** of February 9, 1981 (46 FR 11567–11568), the Service published a notice accepting two petitions to add the southern Selkirk mountain population of woodland caribou to the U.S. List of Endangered and Threatened Wildlife, and announced its intention to issue a proposal to this effect. As further evidence accumulated relative to the precarious status of the population, the Service came to consider it necessary to

immediately implement all available protective measures and to begin full-scale recovery planning. Therefore, an emergency determination of Endangered status for the population was issued in the **Federal Register** of January 14, 1983 (48 FR 1722–1726). A proposed rule to determine permanent Endangered status followed in the **Federal Register** of June 22, 1983 (48 FR 28500–28504).

Summary of Factors Affecting the Species

After a thorough review and consideration of all available information, the Service has determined that the southern Selkirk Mountain population of woodland caribou should be classified as an Endangered species. Procedures found at Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (codified at 50 CFR Part 424; under revision to accommodate 1982 amendments) were followed. A species may be determined to be an Endangered or Threatened species due to one or more of the five factors described in Section 4(a)(1). These factors and their application to the southern Selkirk Mountain population of woodland caribou (*Rangifer tarandus caribou*) are as follows.

A. *The present or threatened destruction, modification, or curtailment of its habitat or range.* As indicated above, the number of caribou in the southern Selkirk Mountain herd is thought to have declined from about 100 in the 1950's to about 30 today. The downward trend was caused, in part, by past logging practices (including road construction) in the herd's range.

Timber cutting can potentially affect caribou habitat by eliminating escape cover, migration corridors, and lichen production. Food availability is probably not now limiting this caribou population.

However, if the population is to be restored to a viable level, estimated by the Forest Service to be about 100 animals, the production of lichens, the primary winter food, would probably have to increase. Timber management strategies would have to be developed which provide timber stands that optimize lichen production.

Currently, the U.S. Forest Service is utilizing caribou management guidelines to design timber sales in caribou habitat. These guidelines are intended to minimize the effects of logging on caribou and also to develop silvicultural prescriptions which may enhance habitat over the long run. Disease and insects, especially spruce bark beetles, are presently impacting timber stands within historic caribou habitat, thereby further complicating management. Salvage sales have taken place and others are planned to remove much of the diseased timber and reduce the spread of bark bettles. Although these sales are being designed utilizing the caribou guidelines, studies and monitoring are necessary to evaluate the actual response of the caribou. Timber harvesting may prove helpful in portions of caribou habitat by providing food and cover necessary for the survial of this population. For example, if caribou numbers eventually are limited by lack of food, and if selective tree removal could improve lichen production and availability, then moderate timber harvesting could be beneficial.

However, at this time more information is necessary on the response of caribou to timber harvesting and managed timber stands. Current studies may indicate the need for a modification of the guidelines to provide for conservation and recovery. Timber harvesting, if not properly designed, can significantly impact caribou, especially in conjunction with the effects of poaching, highways, and forest roads. Listing of the caribou will place a higher priority on the acquisition of research funds to study caribou-timber management relationships.

Wildfire is a natural phenomenon in the range of the caribou. In the past, wildfire sometimes destroyed caribou cover and winter food. The caribou historically tolerated this natural adverse impact by itself. However, the cumulative effects of logging and wildfire have eliminated a great deal of the southern Selkirk herd's habitat.

B. *Overtutilization for commerical, recreational, scientific, or educational purposes.* An important cause of the decline of the southern Selkirk caribou herd is human killing, both legal hunting (prior to 1957) and poaching (now and in the past). Caribou are relatively easy for hunters to approach and shoot. Poaches killed at least one animal from this population in 1980, 1981, and 1982 (B. S. Summerfield, U.S. Forest Service, Bonners Ferry, Idaho, pers. comm.). Poaching losses also occurred in previous years. The problem is greatest where the caribou frequent areas with good road access for hunters, for example, near Trans-Canada Highway No. 3. There are even more roads in the portion of the herd's range in the United States, and the potential for poaching is thus greater there. Fortunately, in the past decade, the herd has spent less time in the United States than in Canada. Had the reverse been true, U.S. caribou poachers might have already eliminated the herd. Finally, there is the possibility that licensed deer and elk hunters could accidentally shoot a caribou.

C. *Disease or Predation.* Disease is not known to significantly impact this caribou population. Certain predators, such as the coyote and black bear, occur in moderate numbers in the range of the herd. They are capable of killing caribou calves and may occasionally do so. Other predators, including the gray wolf, grizzly bear, and mountain lion, are at such low numbers as to have no significant effect on the caribou. Recovery of wolf and grizzly populations (both on the U.S. List of Endangered and Threatened Wildlife) would probably not jeopardize the caribou population, if caribou habitat is preserved and restored.

D. *The inadequacy of existing regulatory mechanisms.* Although hunting of the southern Selkirk caribou is prohibited under the laws of Idaho, Washington, and British Columbia, poaching has continued. Such laws also can do little to prevent habitat disruption.

E. *Other natural or manmade factors affecting its continued existence.* Occasionally caribou are killed in collisions with vehicles along Trans-Canada Highway No. 3 at Kootenay Pass, about 5 miles north of the international boundary. Although no highways exist in the U.S. portion of the population's primary habitat, there is a potential for caribou-vehicle collisions in caribou habitat on U.S. Forest Service roads used by loggers, miners, and recreationists. Vehicle collisions with deer are known to occur on these roads, so it is reasonable to assume that caribou collisions could occur too. As the number of forest roads and subsequent traffic increases, the threat to caribou of such collisions will increase. Johnson (1976) suggested that a single accident along an icy winter road, where the caribou have gathered to feed on salt, could wipe out a significant part of the herd.

In addition to the factors listed above, the decline and continued low numbers of the southern Selkirk herd apparently result from low calf survival and absence of immigration from other herds. The only source for immigrants is British Columbia, but there has been a general decline in woodland caribou in that province (British Columbia Ministry of Environment, 1981). Moreover, the southern Selkirk herd is separated from other herds by barriers, such as Kootenay Lake and the human settlements in Kootenay Valley, and by substantial distance. The nearest herd is about 30 miles away, on the east side of

Kootenay Lake in southeastern British Columbia; it contains about 40 animals (Guy Woods, British Columbia Fish and Wildlife Branch, Ministry of Environment, Nelson, British Columbia, pers. comm.).

The reduced population size of the southern Selkirk herd is far below the minimum necessary to insure survival in the face of natural contingencies, even disregarding the host of human-caused problems described above. Moreover, small population size, along with lack of genetic exchange with other populations, leads to inbreeding. This factor reduces adaptiveness, viability, and fecundity, and may result in extinction. Recent studies suggest that the minimum genetically effective size of a population of large mammals is 50 individuals (Franklin, 1980; Soule, 1980). Other studies have shown that inbreeding in populations of various species of hoofed mammals, including *Rangifer tarandus*, is associated with a significant increase in juvenile mortality (Ralls, Brugger, and Ballou, 1979). Such a condition could be responsible for low calf survival in the southern Selkirk population.

Critical Habitat

Section 4(a)(3) of the Endangered Species Act requires the Service to designate the Critical Habitat of a species, concurrent with listing, "to the maximum extent prudent and determinable." In the case of the southern Selkirk Mountain herd of woodland caribou, the Service considers that the designation of Critical Habitat is not prudent. Such a designation would require publication and extensive publicity of the precise areas occupied by the herd and the kind of habitat utilized. There thus would be a serious risk of facilitating poaching, which, as indicated in factor "B" in the above "Summary of Factors Affecting the Species," is an important cause of the decline of the herd.

Reasons for Emergency Determination

Although the southern Selkirk Mountain population of woodland caribou is somewhat larger than once feared, it can still be ranked as the most critically endangered mammal in the United States. Additional losses, even the premature death of a single animal, could be disastrous, and yet the potential for such losses is great and increasing. Habitat disruption is continuing without full consideration of the needs of the caribou. Poaching occurs regularly; in the most recent known case, a mature female was shot on the Canadian side of the border in October 1982. Existing regulations have not been effective in either stopping poaching or preventing serious habitat disturbance. Roads continue to be constructed in caribou range, allowing greater access for hunters and setting up possible collisions between vehicles and caribou. Any of these problems could at any time result in losses that would be irreversible and reduce the herd to a point at which recovery is no longer feasible.

With respect to these problems, the Service considers it necessary to reestablish the protection provided by the emergency rule of January 14, 1983 (48 FR 1722–1726). That rule was in effect until September 12, 1982, by which time the Service had originally hoped to have a permanent final rule in effect. However, Section 4(b)(5) of the Endangered Species Act of 1973, as amended, requires publication of a proposed rule and notification of appropriate State and County Governments not less than 90 days before the effective date of the permanent final rule. Because of various unforseen delays, a proposal to determine permanent Endangered status for the caribou population was not published until June 22, 1983 (48 FR 28500–28504), State agencies were not notified of this proposal until July 14, 1983, and the Counties were not notified until August 17, 1983. Therefore a permanent final rule could take effect no earlier than November 15, 1983, and it is now necessary to issue a new emergency rule that will implement the protective measures of the Act until that time.

Available Conservation Measures

Endangered species regulations already published in Title 50, Section 17.21, of the Code of Federal Regulations set forth a series of general prohibitions and exceptions which apply to all Endangered wildlife. These prohibitions, in part, will make it illegal for any person subject to the jurisdiction of the United States to take, import or export, ship in the interstate commerce in the course of commercial activity, or sell or offer for sale any member of the southern Selkirk population of woodland caribou in interstate or foreign commerce. It also will be illegal to possess, sell, deliver, carry, transport, or ship any such wildlife which was illegally taken. Certain exceptions will apply to agents of the U.S. Fish and Wildlife Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving Endangered wildlife under certain circumstances. Regulations governing such permits are codified at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes, to enhance the propagation or survival of the species or population, or, in limited circumstances, for takings incidental to otherwise lawful activities. In some instances, permits may be issued during a specified period of time to relieve undue economic hardship which would be suffered if such relief were not available.

Subsection 7(a) of the Endangered Species Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as Endangered or Threatened. This emergency rule requires Federal agencies to satisfy their statutory obligations relative to the southern Selkirk Mountain population of caribou. Federal agencies will be immediately required to insure that the actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of the population.

Listing the southern Selkirk caribou as Endangered would increase the management emphasis that agencies place on the population. Listing will further emphasize the national significance of this population. The combination of legal requirements and increased national awareness will produce a number of advantages for the caribou.

First, as indicated above, all Federal actions that may affect the caribou population will come under the purview of the Endangered Species Act. Since most of the range of the population in the United States is within national forests, and since logging activities therein are having impacts on caribou habitat, it is anticipated that some actions authorized, funded, and carried out by the U.S. Forest Service will be affected by this rule. Such effects should not be major, however, since the Forest Service is already attempting to manage its lands with consideration of the caribou's welfare. The emphasis of timber harvesting may have to be shifted from caribou habitat to other areas, and some inconvenience could result, but there should be no substantial effect on timber production. Moreover, this rule will direct the actions of other agencies on national forests towards caribou preservation, and give the Forest Service a greater capability than it now has to manage habitat for the benefit of the caribou. For example, the Forest Service has minimal legal control over its oun lands with respect to construction of power lines by the Bonneville Power Administration, and the issuance of permits and leases for mineral development by the Bureau

of Land Management. Henceforth, such actions will require consultation with the Fish and Wildlife Service to insure that they are not likely to jeopardize the caribou population.

Second, listing the caribou as Endangered will bring Section 6 of the Endangered Species Act into effect with respect to this species. Therefore, the Fish and Wildlife Service will be able to grant funds to the States of Idaho and Washington for management actions aiding the protection and recovery of the caribou. Since the original emergency listing of the caribou on January 14, 1983, such funds have been provided to both States, and, as noted above, resulting studies have contributed substantially to our knowledge of the herd.

Third, the agents of the Service's Divison of Law Enforcement can be assigned to enforce the Act's prohibitions against taking. A law enforcement strategy plan can be developed. Without such protection, these agents could only be used if any illegally taken carcass or its parts were transferred in interstate or foreign transportation or commerce.

Fourth, listing of the population will provide for the continued development of the caribou recovery plan that was begun after the original emergency listing of January 14, 1983. Such a plan will draw together agencies (U.S. and Canadian) having responsibility for caribou conservation. The plan will establish an administrative framework, sanctioned by the Act, for agencies to coordinate activities and cooperate with each other in conservation efforts. The plan will set recovery priorities and estimate the cost of various tasks necessary to accomplish them. It will assign appropriate functions to each agency and a timeframe within which to complete them. The plan will establish a formal blueprint for periodic task review. Each agency may now have its own program for caribou management. These programs could be consolidated and modified into one overall recovery plan that would give conderation to all factors needed for caribou conservation.

Fifth, the U.S. State Department could become involved on behalf of the Fish and Wildlife Service. For example, the State Department could encourage Canadian law enforcement agencies to improve surveillance for poachers seeking caribou in the southern Selkirk population. In addition, the State Department could help to encourage Canadian and provincial government agencies to give special consideration to this caribou population when they propose dams, highways, timber sales, etc., in the Canadian part of the range of the population.

National Environmental Quality Policy Act

In accordance with a recommendation from the Council on National Environmental Quality Policy Act (CEQ), the Service has not prepared any NEPA documentation for this proposed rule. The recommendation from CEQ was based, in part, upon a decision in the Sixth Circuit Court of Appeals which held that the preparation of NEPA documentation was not required as a matter of law for listings under the Endangered Species Act. *PLF vs. Andrus* 657 F.2d 829 (6th Cir. 1981).

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Author

The primary author of this rule is Ronald M. Nowak, Office of Endangered Species, U.S. Fish and Wildlife Service, Washington, D.C. 20240 (703/235–1975 or FTS 235–1975).

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Endangered and threatened plants, Fish, Marine mammals, Plants (agriculture).

Regulation Promulgation

PART 17—[AMENDED]

Accordingly, until July 23, 1984, Part 17, Subchapter B of Chapter I, Title 50 of the U.S. Code of Federal Regulations, is amended as set forth below:

1. The authority citation for Part 17 reads as follows:

Authority: Pub. L. 83–205, 87 Stat. 884; Pub. L. 95–632, 92 Stat. 3751; Pub. L. 96–159, 93 Stat. 1225; Pub. L. 97–304, 96 Stat. 1411 (16 U.S.C. 1531, *et seq.*).

2. Section 17.11(h) is amended by adding the following, in alphabetical order, to the List of Endangered and Threatened Wildlife under "Mammals":

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
•	•	•	•	•	•	•	•
Caribou, woodland.	*Rangifer tarandus caribou.*	Canada, U.S.A. (AK, ID, ME, MI, MN, MT, NH, VT, WA, WI).	Canada (that part of southeastern British Columbia bounded by the Canada-U.S.A. border, Columbia River, Kootenay River, Kootenay Lake, and Kootenai River), U.S.A. (ID, WA).	E		NA	NA.
•	•	•	•	•	•	•	•

Dated: October 20, 1983.

G. Ray Arnett,

Assistant Secretary for Fish and Wildife and Parks.

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